	A	B	C	D
1	**IRWMP Section**	**Recommendation**	**Resources Needed**	**Comment**
2				
3	**9.2.1.1 New Wells**	Develop requirements for water supply evaluations and pump testing for new public supply wells.	Recommendations have been made in IRWMP and Appendices which need to put in ordinance format and vetted. Needs input.	Could be presented for vetting almost as written.
4		Certified hydrogeologists should recommend where new public water system wells would be drilled	Recommendations have been made in IRWMP and Appendices which need to put in ordinance format and vetted. Needs input.	Could be presented for vetting almost as written.
5		Develop a program to notify landowners of areas where the uranium activity is expected to exceed the MCL.	This needs input on what test records are available, legal questions, etc. Also provide existing point of use report.	This could be difficult as it may affect property values. Not all wells, even in areas of concentration have high uranium.
6		Develop well spacing criteria to govern the distance between new public supply wells and existing wells in densely populated areas to help prevent well interference problems.	Needs input.	Different areas may require different spacing.
7		Study is recommended to identify how groundwater travels in the Foothills and Mountains area.	Needs input.	Important in determining minimum lot sizes and density.
8				
9	**9.2.1.2 Land Development**	Develop a program to identify and protect the groundwater recharge areas in the Foothills and Mountains area	Suggestions given. Needs input.	Wide ranging goal.
10		Develop requirements for new large subdivisions with a defined number of lots to construct on-site storm water detention/retention basins to capture storm water runoff.	Needs input.	Seems like an engineering calculation.
11		Encourage the legal construction of retention/detention basins on private properties in the Foothills/Mountains area.	Needs input.	"Encourage" needs some definition.
12				
13	**9.2.1.3 Water Conser-vation and Waste-water Recycling**	Evaluate the feasibility of installing meters on all its water service connections within its County Service Areas and Maintenance Districts.	Needs input.	Political implications, State law forcing to happen anyway.
14		Develop water rate schedules that will encourage water conservation.	Part of 9 above. Will need input.	May be specific to each district.

	A	B	C	D
15	**a. Oakhurst**	Proceed with plans to construct a pipeline crossing of the Fresno River to enable the development of additional sprayfields on the north side of the river	Already in progress, but to south side of river.	May be abandoned for sprayfields on south side.
16		Eventually take water to the Sierra Meadows golf course area for irrigation use on the golf course and surrounding landscaped areas.	Needs input.	Needs leadership.
17	**b. Bass Lake**	Evaluate alternative disposal options for the Bass Lake WWTP	Needs input.	Start with plant personnel suggestions?
18				
19	**9.2.1.4 Water Quality**	Review ordinance 17.48.020 and specifically the size and number of lots allowed to have individual septic systems in large subdivisions.	Needs input.	May be specific to each area and type of soil.
20		MD 22F committee move forward with the feasibility study of the possible acquisition of the four Hillview water systems by the County.	MD 22F committee may no longer exist. Needs input.	May be moot or difficult to pursue.
21		Acquire Broadview Terrace Water Co. and consolidating it with the Hillview Water Company as part of the Hillview acquisition study mentioned above.	Hillview acquisition seems to be currently off the table. Needs input.	See above
22		Conduct feasibility study for sewering areas with sewer systems.	Needs input.	Vague, politically sensitive.
23		New developments install centralized treatment and disposal systems instead of private septic tanks where technically and economically feasible.	Needs input.	See above
24				
25	**9.2.1.5 Water Supply**	Feasibility studies of developing surface water supplies for treatment and delivery for domestic use be conducted In the lower Coarsegold and Raymond-Hensley areas.	Needs input.	Funding may be problem.
26		Study above should also evaluate the potential of importing groundwater pumped from other regions of the County.	Needs input.	See above, may just be referring to YLP
27		Study above should evaluate the number of dwelling units that are sustainable with each of the identified water sources.	Needs input.	See above
28		Studies should be done on the cone of depression due to deep well pumping in systems such as Yosemite Lakes.	Needs input.	See above
29				

	A	B	C	D
30	**9.2.1.6 Watershed Management**	Project areas must be defined	Maps of area(s) are available	Though the entire project area is the county, sub areas based on need would then be mapped out.
31		Soils maps need to be prepared and analysed in order to evaluate the potential results of a vegetation management program in the area.	Existing soil maps of the County should be reviewed and verified. Among other characteristics, permeability, water-holding capacity, and slopes should be included.	Madera County NRCS and the RCDs in Madera County could assist with this task
32		Vegetation coverage maps have to be prepared and analyzed.	Existing vegetation maps of the County should be reviewed and verified.	There are already studies of this by Ken Schmidt and the NRCS and RCDs. These need to be reviewed first.
33		The most favorable areas for vegetation management treatment should be identified based on soil and vegetation information.		These could be selected based on the above studies and after checking APN with county to verify if it is private land.
34		Management recommendations to minimize fire danger and maximize water availability and biodiversity should be developed for those specific areas considering the constraints and opportunities that each one has.		Refer to the MC CWPP and the RCDs for assistance with rceommendations.
35		Selected operational projects must be able to quantify costs and benefits, especially the water supply increase in oak woodland, brushland, and forest areas.	Projects must address: methodology to verify additional water produced, facilities needed to capture and distribute the water for beneficial use, project costs and benefit/cost ratios, environmental compliance, procedures for vegetation management in brushland and forest areas based on current and historical project results.	This will assist with future grant funding.
36				
37	**9.2.2.1 Water Supply**	Water Enhancement Project (Madera Water Bank)	MID pursuing grant and bond funding	
38		Madera Canal/Hidden Dam Pump Storage Project	MID pursuing USACE authorization	
39		Madera Lake Regulating and Recharge Project		
40		Lateral 32.2 Regulating and Recharge Reservoir		
41		Merced Irrigation District to CWD Intertie Canal	Feasibility study & funding	

	A	B	C	D
42		CWD District-Wide SCADA Improvement Project	$300,000 grant funding received. Project implementation	
43		Root Creek Surface Water Project	Permitting & construction of facilities	
44		WWTP Effluent Reuse (Agricultural Reclamation)	Funding	
45		Residential Water Metering - City of Madera & Chowchilla	Funding	
46		Ultra-Low Flush Toilet Replacement Program City of Madera & Chowchilla	Funding	
47		San Joaquin River Storage - Temperance Flat	Completion of Upper SJR Surface Storage Investigation.	
48		Expansion of CWD and MID Service Areas	Approval by LAFCO and USBR	
49		Regulating / Recharge Basins in CWD	Feasibility study & funding	
50		Improved Water Level Control Structures in CWD	Feasibility study & funding	
51		Improved Water Measurement Structures in CWD	Feasibility study & funding	
52		Surface Water Storage Reservoirs in CWD	Feasibility study & funding	
53		Replacement of Cast-In-Place Pipe in CWD	Funding	
54		Replacement of Discharge Valve at Friant Dam	Feasibility study & funding	
55		Madera Lake/Fresno River Diversion Structure	Feasibility study & funding	
56		City of Madera/MID Storm water Recharge Project	Feasibility study & funding	
57		City of Madera Stormwater Retention Basin Project	Feasibility study & funding	
58		Replacement of Low Flow Gate at Hidden Dam	Feasibility study & funding	
59		Fresno River to Madera Canal Diversion Structure	Feasibility study & funding	
60		City of Madera Airport Recharge Project	Feasibility study & funding	
61		Arundo Removal Project	Funding	
62		Retirement of Irrigated Agricultural Lands		
63		Root Creek Flood Control and Water Supply	Feasibility study & funding	
64		MID Downtown Fresno River Project	Feasibility study & funding	

	A	B	C	D
65		CWD River Channel Seepage Enhancement Feasibility Study	Feasibility study & funding	
66		Madera Canal Surface Storage Reservoir Feasibility Study	Feasibility study & funding	
67		Buchanan Dam Enlargement Feasibility Study	Feasibility study & funding	
68		Chowchilla River Surface Storage Feasibility Study	Feasibility study & funding	
69		CWD Groundwater Recharge Pond and Recovery Well Feasibility Study	Feasibility study & funding	
70		Madera Canal Capacity Increase	Feasibility study & funding	
71		County actively engage to protect San Joaquin River water supply		
72		County actively participate in water banking projects		
73		County purchase 215 water		
74				
75	**Water Quality 9.2.2.2**	In the San Joaquin River water shed, further study is needed to determine the type of organic material that is the cause of organic matter, whether any watershed control is feasible, and whether alternative disinfection and filtration and treatment processes can correct the problem at a reasonable cost.	Someone will need to take samples of the material prior to treatment and or review existing operational reports and smapling previously performed by the various districts/systems. There is sufficient data available in the industry to determine costs of filtration and ozone treatment. A review of that information and the applicability to the various systems should be undertaken.	If individual systems are out of compliance they may already be working on these issues.
76				
77		The County should develop a program to identify and properly abandon wells no longer in use to prevent the cross-contamination of aquifers. The Count/s well standards (Title 13, section 13.52) should outline the criteria for determining whether a well should be abandoned and the process for abandonment.	The existing ordinances should be reviewed and updated.	County staff should be able to use federal, state and other local agency guidelines for well abandonment to assist with standards and ordinance updates thus minimizing the efforts needed to accomplish this task.
78				
79	**9.2.2.3 Land Use and Develop-ment**	Investigate the following policies for legal and institutional feasibility and for potential adoption.	Needs input.	

	A	B	C	D
80		a. Limiting new agricultural development if water supply is not sufficient to meet demands and/or requiring annexation into a water or irrigation district as a prerequisite.	Needs input.	
81		b. Metering of water produced by groundwater wells.	Needs input.	
82		c. Groundwater pump tax or land-based assessment to fund water supply projects.	Needs input.	
83		d. Requiring all new large development to provide the approving agency a detailed plan to balance the development's water supply	Needs input.	
84		e. Consider development of a water impact fee program for small development projects countywide.	Needs input.	
85	**9.2.2.4 County Service Areas and Maintenance Districts**	a. Seeks funds from all available sources to repair County operated water and sewer systems.	Needs input.	
86		b. Implement new rate structures that will allow districts to become self sufficient.	Needs input.	
87		c. County should look at combining CSA and Maintenance Districts where possible.	Needs input.	
88				
89	**9.2.2.5 Flood Control**	Proceed with all corrective actions as outlined in the action plan.	Needs input.	
90		County initiate formation of group to discuss development of multiagency project to construct and operate storm water detention/recharge basins.	Needs input.	
91		Develop Emergency Response and Recovery Plan	Needs input.	
92		Provide adequate staff and funding to develop and implement flood control program for the County.	Needs input.	
93	**9.2.3 Groundwater Monitoring Program**	Implement Countywide groundwater monitoring program.		